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COMMUNICATIONS.

MUSHROOM OR TOADSTOOL POISONING.

BY JULIUS A. PALMER, JR.,
Of Boston, Mass.

[This article, kindly furnished us by the author, was originally published, in nearly the same form, in the *Moniteur Scientifique*, Paris, Jan., 1879. The subject is so important and the information on it in text books so vague, that it cannot fail to be welcome to many readers.—ED. REPORTER.]

The terms fungus, mushroom or toadstool poison are synonymously used by mycologists. The three words may be so understood in this article. Mushrooms may poison the human system in three ways, as follows:—

1. They may simply disagree with the organs of digestion, as in the case of the hard, tough varieties of fungi, or in the case of the common mushroom, which, in a partly decomposed state, often generates hydrogen gas in such quantity as to produce nausea and vomiting.

2. They may be slimy, acrid or nauseous. Many mild *Boleti* are too slimy for food. The *Russulae* have very acrid varieties. *Polyporus Squamosus* and others are bitter, and taste of leaves and grass.

3. They may contain a subtle alkaloid, without taste, smell, or other indication of its presence, as in the group known as the *Amanitas*.

The symptoms of poisoning by indigestion are soon manifest, and need occasion no alarm. Relief comes in the natural channels; it may be hastened by emetics, by warm water, or by plunging the finger into the throat.

The effects of poisoning by some acrid or nauseous element are immediate, and present nothing to discourage physician or patient. Expulsion through the mouth or alvine canal, followed by emollients of sweet oil, slippery elm or gum arabic, will soon allay the irritation.

It is probable that most of the fatal cases of poisoning by toadstools are due to amanitine. Physicians have in all ages confessed their utter inability to find an antidote for this poison. An eminent chemist stated to me that he should regret to receive for test purposes the stomach of any one so poisoned, as he should not know where to turn for a reagent. This fungus being eaten has no burning or unusual taste. It passes harmlessly through the stomach, mixed with the other food. From eight to fifteen hours after ingestion, dizziness, nausea and purging begin, followed by fainting, delirium and death.

The foregoing classification is of great importance to medical men. Persons eating noxious mushrooms are, by that very fact, unable to identify the species that caused their sickness. Amateurs will often select six toadstools and class them as of one kind. Let the physician inquire carefully how much time has passed between the suspected meal and the attack. The shorter this elapsed time, the more hope for success by appropriate treatment. Poisoning by amanitine being the most common and most fatal, to this part of our subject shall the rest of this article be devoted. We shall cite three cases.

Two persons at Sautry, near Corbeil, France, made a meal from the *Amanita Bulbosa*, under which head the French include our *Amanita vernus*, *phalloides* and *mappa*, as but slight variations divide these three members of the group.

Beyond vertigo in one case, no ill effects were felt until three and eight, respectively, of the morning following. One patient even slept calmly after the vertigo passed away. Once attacked, however, the usual symptoms followed, and inside of three days both were dead. Space forbids an enumeration of their symptoms. Briefly, from attack to post-mortem appearances, these were little different from those of *Cholera Asiaticum*.

The physician understood the case, yet after the consecutive use of coffee, tea, antimony, ether, whites of eggs, anti-vomitives, laudanum, milk, leeches, ice and emollient fomentations, he says—

"None of the remedies were followed by the least sign of amelioration." He afterward expects (as simple alleviatives) ice internally, and emollients applied externally to the abdomen.

A report of a more recent case, kindly furnished me by the consulting physician, is the second now before me. Any medical man would be struck by their perfect identity. Patients, attendants, and physicians seem to have assumed parallel parts in an equally sad drama. Four persons were poisoned in this case, of which number three died. The survivor's letter to me merits publication, and has been admired for its simplicity and clearness by many medical men. The fatal meal was eaten at four o'clock in the afternoon of Monday, October 2d, 1876. About midnight all were attacked who had partaken of it. The first death took place on Thursday following, at ten A.M. The second of the three on the next day, or Friday morning. The one who recovered experienced nothing but a severe diarrhœa. Her exemption and the latest of the three deaths will be the subject of future paragraphs.

The third and still more recent case is identical with the others. Details are, however, not at my command. Two of the patients were children, and died in thirty-six hours. One, the father, was subject to severe delirium, jumping from a second-story window. The attack came on about eight hours after ingestion. All these cases are alike in that up to the actual attack no person felt the worse for the fatal meal.

Mushrooms make the same use of the atmosphere as men; even their exhalations are, accordingly, air vitiated with their properties.

About four years ago a number of poisonous mushrooms (not amanitas, but of a totally different family) were sent me with edible fungus. The two varieties had lain twelve hours in the same box. The noxious ones were rejected, the

esculent washed and eaten. In a moment my appetite was gone. Violent perspiration, vertigo and trembling were the next symptoms; then chills, nausea, purging and tenesmus, all within thirty minutes. Now, the substance could not have reached the bowels. The virus, absorbed from the noxious fungus, permeated the whole system through eating the harmless ones; unmixed with other food, it acted upon the muscles, through an empty stomach. Once spent, the attack passed off, and the substance, from which the system had absorbed all the venom, was digested without exciting undue motion when it reached the bowels. Probably this result was also due to the use of olive oil as a remedy.

Again, absorption may take place through the pores of the skin. An amanita held in the closed hand will produce all the symptoms of poisoning, even to convulsions. Once, while perspiring from a long walk, I undertook to bring in a large bunch of these mushrooms for an artist. Seated by them in a close car, holding them in my warm hand, although protected by a paper wrapper, a fearful nausea came over me. The toadstool was not at first suspected, yet I had all the symptoms of a sea-sick person, and was only relieved by a wide distance between myself and the exciting cause.

While writing this article, a friend sent me two very elegant specimens of the amanita tribe. They were in a confined box. On opening it, I smelt of them a few times and allowed the box to lie near my desk while I wrote to a medical gentleman anxious to procure such for chemical experiment. Having sent them away the matter was dismissed from my mind until three hours after, when an attack of vomiting and oppression at the stomach enforced it upon my attention. The whites of my eyes became livid, and even to noon the day following the leaden color of my face was noticed by more than one person.

One more example and we will draw the corollary, and speak of remedial measures.

This time I chewed a piece of an amanita the size of a half dime, ejecting the substance but swallowing a little of the saliva. Constriction of the muscles of the throat was the first symptom. One attack of vertigo followed, but it was momentary. Disgust with customary employment, like that felt in sea sickness was the most constant sign of the presence of the poison. Seventeen hours after swallowing it, I, for the first time, could have vomited, and felt a slight straining and tenesmus, after which the effects passed quickly away.

From these personal experiments the following conclusions may be drawn: The poisonous principle of fungus being absorbed by a harmless element, if the latter be eaten, the venom acts more quickly and surely. Additional proof of this assertion exists in the fact that if the *amanita* be cut in sections and laid in vinegar, the fungus may then be eaten without danger to life, but on a very small dose of the vinegar, death will follow more speedily than if the whole toadstool be eaten. One stage in the process of absorption has been completed. This last conclusion admits of one exception. In the second case of poisoning cited herein, a single member of the family escaped death. She put vinegar on the toadstool in her plate before mastication. The alkaloid was neutralized thereby, or at least fused with acid strong enough to occasion no harm excepting unusual action of the bowels.

But, after ingestion, any administration of remedies calculated to precipitate the alkaloid, or to amalgamate it with the gastric juices, only helps absorption and lessens the patient's chance of expelling it before his digestion has extracted all its venom. A dog poisoned with *amanitine* received vinegar as an antidote; his symptoms were all fearfully aggravated and great distress ensued. The presence of the assimilating agent simply aided the system in absorbing the virus. Sweet oil was given, when he vomited the fungus mixed with whitish mucus, and, on a milk diet, recovered.

Again, the inflammation, cramps, colic and straining at stool, do not cause the death of the patient, but are simply secondary effects of the poison absorbed. A few drops of *amanitine* injected up the back of a frog will produce death in one hour, without leaving on the body the slightest indication of inflammation. My most violent personal experience with this poison was when I was inoculated through the mucous membrane by the sense of smell alone. The oppression in the stomach and abdomen was very severe, yet not a piece of poisonous fungus lay in the intestines.

The poison by chewing a small piece shows how little may endanger human life, and further, that the operation through the digestive functions is so slow that any members of the *amanita* family should be tested with great care as esculents.

In speaking of the remedial measures it will be well to bear in mind that these remarks apply to the *amanitas* alone, the presence of which can be inferred by the physician, wherever the attack commences at eight hours or over after eating the mushrooms. Whatever the remedies used, they

must be introduced into the system as *directly* as the physician's judgment may deem possible. The writer of this article is not a medical man, and he does not propose to dictate to those who have given drugs and their effects, the human frame and its wonderful network, their attention for many years.

Yet subcutaneous injections and enemata possess the most important qualifications for reaching poison by fungi. Two drugs may be suggested for hypodermic use; tobacco and atropine or belladonna.

The throbbing heart of a frog is silenced by a drop of muscarine; or Schmiedeberg's alkaloid from *Amanita Muscarius*. Action is restored by a drop of atropine. Animals who have been hypodermically injected with atropine are unharmed by a fatal dose of muscarine. Contrariwise, patients have eaten *amanitas*, and by means of emetics and purgatives every trace of the fungus has been removed. Stimulants and alleviatives have apparently built up the system; sixty hours after, præcordial distress, faintness, coldness of extremities and other symptoms have been manifested, proving that in rejecting the fungus the system had not discharged itself of the poison. By most mycologists, either emetics or cathartics are considered worse than useless in poisoning caused by *amanitine*. Injections of warm water, soap and water, perhaps mixed with oil of sweet almonds or oil of olives, on the contrary, relieve the tenesmus, and by producing motion in the lower intestines much assist the bowels in expelling the foreign substance in a natural manner.

Then the physician should use subcutaneous injections of atropine (which seems to control this most powerful of known poisons), or such other drug as the symptoms may indicate, or his discretion dictates.

Perhaps this article would be incomplete without a description of the leading traits of the *amanita* family of mushrooms. These are, first, a volva or wrapper, which encloses the young plant before it leaves the soil, and may be found at the base of the stem of the full-grown mushroom. The remains of this volva also appear on the cap or pileus, in the form of irregularly scattered and sub-persistent warts or scurf, easily rubbed off, leaving the skin intact. The gills underneath the cap are pure white, and if the mushroom is laid on blue paper a few hours, the white deposit of the spores will resemble delicate shading with an artist's pencil. The color of the mushrooms is very variable, red, orange, green, yellow and white, with intermediate

shades. The most common to this latitude is pure white or yellowish-white cap and otherwise pure white. There are several kinds which may be safely eaten, but it is far better for an amateur to avoid the whole group. The dangerous varieties are extremely common.

We make daily use on our table of a great many varieties of mushrooms for food, gathering them fresh in summer and drying the superfluous stock for winter use. Personal experiments prove that this constant use develops an extreme sensitiveness to the toxicological properties of fungi; the system does not become hardened to their noxious elements. Contrariwise, it repels them and is repelled by them in quantities which a stranger to such diet would not notice.

Because a mushroom is eaten with impunity by the lower animals, it by no means follows that it is fit for the food of man. In the case of October, 1876, mentioned herein, the amanitas were fed to the pigs, who ate the whole stew without ill effects. Swine are also proof against the noxious properties of *amanita muscarius*, and rabbits will swallow unharmed some other non-esculent fungi. On the other hand, *agaricus melleus* is said to have killed a dog in twelve hours, and a cat to have died in terrible convulsions from a meal of *marasmius oreades*. I have seen a dog very sick from biting off the tops of the *coprinus comatus*; all these are edible mushrooms.—*Moniteur Scientifique, Du Quesneville, Paris, Rue de Buce, 12th Jan. 1879.*

CHRONIC INDOLENT VARICOSE ULCER.

BY E. W. HILL, M.D.,
Of Glen Falls, N. Y.

I have been very much interested in the series of articles in the *REPORTER* upon Ulcer of the Rectum. Having been an interne in one of the largest hospitals in the United States, I know how unreliable hospital reports are (not from any intention of fraud, but oftentimes from the amount of detail work to be done in a given time), and sometimes the reports have to be made to please the visiting surgeon's hobby, and, therefore, I prefer those from private practice.

There is one form of ulcer that I wish to bring to the notice of the readers of the *REPORTER*—Chronic Indolent Varicose Ulcer. During the last two years I have had five cases, and every one of them had been pronounced incurable by a regular or quack physician, or both. In three of the cases a perfect cure has been effected, one was very much improved, and one is under treatment.

CASE 1.—Mr. W. R., aged about 50 years; has been a constant drinker of alcoholic liquors for over thirty years. Soon after the war commenced he enlisted. He contracted syphilis; was in the hospital long enough to get the primary sore healed, when he returned to his regiment. About 1868 he was kicked by a horse, and sustained a compound comminuted fracture of the leg. Soon after his recovery from this injury the ulcer appeared upon the outer malleolus of the leg. My treatment was, first to thoroughly cleanse the sore with a charcoal poultice, and then stimulate with balsam Peru and *tight* strapping. I continued this treatment for two months, with only slight improvement. I then put him upon potass. iodidi, 3 ss. doses, three times a day, and improvement commenced at once, and he was cured in a month.

CASE 2.—Mrs. N., aged 48 years; has had two children; has had the ulcer upon her lower right leg for the last twelve years. Treatment was stimulating applications of balsam Peru, and occasionally pure carbolic acid and *tight* strapping; continued this for two weeks, with no change. We now applied, locally, cod-liver oil (and here let me say that in debilitated subjects you will find the oil to exert its beneficial effects in a truly wonderful degree, and very much quicker than when taken internally); still no marked improvement. I now removed, with a scalpel, the entire outer edge of the ulcer, which was a hardened, cicatricial tissue, and again commenced the balsam and *tight* strapping, when you could see the improvement from day to day. But she was unfortunate, and could not continue the treatment. Had she continued it a couple of weeks longer I believe there would have been a successful termination.

CASE 3.—Mr. A. R., aged 55 years; fine formed; very intelligent; active business man. About three years ago he noticed a pimple on the calf of his right leg; pricked it, and thought no more about it for some days, when he noticed that it had grown larger. Then he called the attention of his family physician to it, who was a homœopath. After some months of unsuccessful treatment, the patient went to Rome, N. Y., to the cancer doctors, but as they did not agree about the case, he came home and got in such a nervous condition that he had to give up business. He lived in this miserable condition, unhappy himself, and making every one about him the same. On Jan. 7th, 1878 he came and showed me the ulcer. I told him that I could cure it in less than two months, without the use of any medicine. He was very incredulous, and wanted

to know if any secret remedies were to be used. I told him none. Had him cleanse the ulcer with a charcoal poultice, and then I applied the balsam and strapped it tightly. It commenced to heal at once, and in six weeks he was cured.

CASE 4.—Mrs. McM., aged 55 years; ulcer of thirty years' standing. She had been told by a number of doctors that it could not be cured. She called me, to see if I could do anything to relieve the pain, as it was very intense, night and day. She said that she could not tell when she had slept all night through, for the pain. I took off the sheet lead that she kept it covered with, and had a charcoal poultice applied that night, and I applied the balsam and tight strapping the next morning. She told me that after the pain from the tight straps wore off she had no pain, and was surprised to find that she had slept one night without being awakened by the ulcer paining her. That was the first night after strapping. Perfect cure in two months.

CASE 5.—Mrs. K., aged 35 years; strong, healthy woman; had been troubled with the ulcer for three years. She did not call me expecting to get cured, as she had been told that it could not be done. She was going home the next morning, and so I could only dress it and have her husband continue the treatment—balsam and tight strapping. I have since received a letter from her, and I will copy a few lines: "It has healed about half, I should think, and is not very painful, except after doing it up. . . . It looks quite like getting well, but I hardly dare to hope yet."

There is no reason why any one cannot cure a simple chronic varicose ulcer. If any physician has one that he considers incurable, if he will send it to me, if I do not cure it, I will return the patient free of charge, and pay traveling expenses.

MEDICAL SOCIETIES.

AMERICAN DERMATOLOGICAL ASSOCIATION.

THIRD ANNUAL MEETING.

The third annual meeting of the American Dermatological Association was held in New York, on August 26th, 27th and 28th.

FIRST DAY.

After a brief private meeting for business, the regular proceedings of the Association were opened by an address from the President, Professor Louis A. Duhring, of Philadelphia, on "The Progress of Dermatology in the United States."

After alluding to the few scattered monographs and articles on cutaneous affections published

in this country during the Eighteenth century, Dr. Duhring went on to depict the condition of dermatology in the period succeeding the Revolution.

Cutaneous diseases at this date were shrouded in the utmost obscurity, all, with few exceptions, being disposed of with the single general designation of "skin diseases," and even so eminent a physician as Dr. Benjamin Rush stating that "leprosy, elephantiasis, scurvy and venereal disease, appear to be but different modifications of the same disorder," and that "the same causes produce them in every age and country." About the end of the last century Hunter's work on the venereal was republished, being the first work of the kind which had appeared in this country, although syphilis had made its appearance in Boston as early as 1646.

With the close of the century we note the first of a series of admirable, and in some instances remarkable, theses, mostly presented in the University of Pennsylvania, on dermatological subjects, among which may be mentioned dissertations on the eruptive fevers and on rhus poisoning. Other essays on the physiology of the skin and on cutaneous absorption, followed, and in these the influence of the famous Dr. Rush upon his pupils is manifest.

Dr. Duhring continued, sketching the gradual progress of dermatology through the earlier years of the present century, and alluded to the ignorance and indifference which prevailed everywhere upon the subject. A student asking information upon a disease of the skin from a physician, received the reply, "Sir, I know nothing of skin diseases; you must go to the surgeon;" appealing to the surgeon he was met with, "Sir, I must refer you to the physician." The situation seemed hopeless. The whole subject was shrouded with a sort of mystery, and was deemed either too obscure or too insignificant to be worthy of serious attention. A few foreign works were translated, but nothing original appeared. The first institution devoted to the treatment of cutaneous affections was the "Broome Street Infirmary for Diseases of the Skin," in New York, opened June 22d, 1836, with Drs. H. D. Bulkley and John Watson in charge. The following year a course of lectures was delivered by Dr. Bulkley, being, it is believed, the first ever given on the subject in this country. The importance of the study of diseases of the skin was now for the first time beginning to be realized, and American students were seeking the hospitals of Europe, especially those of Paris, where, at the "Hôpital St. Louis," under Bielt and Cazenave, clinical instruction in skin diseases was made highly attractive. Indeed, at this period there existed only one school of dermatology, that of Paris, and the influence of the French school was long felt in this country.

The first American work on diseases of the skin was "A Synopsis of the Symptoms, Diagnosis and Treatment of the more Common and Important Diseases of the Skin," with sixty colored plates, by N. Worcester, M.D. Philadelphia, Boston, Cincinnati, 1845. Dr. Worcester was Professor of Physical Diagnosis and General Pathology in the Medical College of Ohio, at Cleveland. His work was a mere compilation.

The plates were much reduced in size, and very imperfectly reproduced. About this time, and later, a number of foreign works were brought out in this country, chiefly translations from the French. The year 1853 was marked by the creation of special departments in skin diseases at various dispensaries in New York, and at the Howard Hospital, in Philadelphia. Students of dermatology, well qualified by long sojourn abroad, and deeply interested in their work, were now (1860-70) beginning to return from Europe, and to enter upon the field as instructors and lecturers. Paris and her long line of famed teachers, who for so many years shed lustre on the "*Hôpital St. Louis*," no longer claimed the exclusive attention of American students. One now began to hear on all sides of the teachings of the eminent Viennese dermatologist Hebra. Students flocked to Vienna from all parts of the world, eager to listen to the words of a teacher who was able to unfold and explain in plain language these hitherto obscure diseases. Among the number were a few Americans, who, after several years' study with Hebra and his distinguished conferees, returned home well prepared to teach the principles of the new dermatology, the practical value of which they were not slow to recognize. Among the earliest of these was Dr. J. C. White, the former President of the Dermatological Association, and for some years past Professor of Dermatology in Harvard University. In addition to numerous articles in the journals, Dr. White, as early as 1861, gave the first lectures on Dermatology in Harvard University. Following the close of the late war numerous clinical professorships and lecture-ships were established in different medical colleges.

The translation of Hebra's work marked an important epoch. Great confusion existed in dermatological writings, and particularly regarding nomenclature, and it needed a strong hand to reduce what threatened to be chaos to order. English nomenclature in particular, represented by Wilson, added not a little to the confusion of the time. Especially trying was it that this authority, whose works had been so largely read in this country, should have abandoned himself to the demolition of his own nomenclature. New words were coined to take the place of old, tried and well-known terms, and the spelling of many names was so changed as to render them barely recognizable. As an instance, no less than five names were in turn proposed by Mr. Wilson for the disease we now know (and let us hope may ever know) as psoriasis; lepra, psoriasis, alphas, lepra alphas, and lepra Græcorum were all tried, and sooner or later rejected. These numerous and constant changes, actuated by whatever motives, emanating from so high an authority as Mr. Wilson, were certainly disastrous in their results. A brief but trenchant article published at this time (1870) by Dr. J. C. White, entitled "*An Amusing Chapter in Nomenclature*," showed in what an unenviable position Mr. Wilson had placed himself.

While the labors of Hebra did much to simplify nomenclature, it has been left to the American Dermatological Association to accomplish very much in this direction for America.

The earliest Dermatological Association in this country is the New York Dermatological Society, founded in 1869, which has done much good work. In 1870 was started the American Journal of Syphilography and Dermatology, edited by Dr. M. H. Henry, which was continued through five volumes; containing many original and valuable articles, and was succeeded by the Archives of Dermatology, which, under the editorship of Dr. L. Duncan Bulkley, continues its work as an exponent of American Dermatology. In 1876, at the International Medical Congress, held in Philadelphia, the plan of this association was formed, which now represents in its membership the dermatologists of every section of our country.

In conclusion, Dr. Duhring said he should have been pleased to have continued his subject to the present day, but the vast accumulation of material rendered this impossible at the present time.

Following the address by the President, came a paper by Dr. I. E. Atkinson, of Baltimore, entitled "*A Case of Incomplete Vitiligo*," the patient being a mulatto woman, in whom the chromatic changes accompanying this disease displayed somewhat unusual symptoms, and ran a peculiar course. Dr. Jas. Nevins Hyde, of Chicago, then read a paper entitled "*A Contribution to the Study of the Bullous Eruption Induced by the Ingestion of Iodide of Potassium*." At the afternoon session Dr. L. Duncan Bulkley, of New York, read an account of "*Two Cases of Chancre of the Lip, Probably Acquired Through Cigars*." A very interesting discussion on the propagation of syphilis by unusual means followed the reading of this paper; cases were cited where the disease had been carried by means of tooth brushes used in common, towels etc. Dr. Sherwell, of Brooklyn, described the method of cigar manufacture in Havana, where women of the lowest class, and of filthy habits, are accustomed to roll the cigars on the inside of the thigh, in the course of which manipulation the cigar could easily come in contact with the secretions from the genitals, etc. Dr. Bulkley said he had been informed by the head of a large cigar manufactory, that, although machines were at hand for the purpose of finishing the rolling of the cigar, workmen would persist in using saliva for this purpose. Several of the members objected to the title of Dr. Bulkley's paper, believing that the source of infection in the cases described had not been proved to be derived from an infected cigar. It was suggested that the title of the paper should be amended, so as to read "possibly acquired through cigars."

Dr. George H. Fox, of New York, read a paper entitled

The Treatment of Eczema and Ulcers of the Leg by an Elastic Tubular Bandage.

He had frequently found, he said, that the "solid rubber bandage" of Martin, so far from doing good in eczema of the leg, frequently did actual harm. This occasional untoward result sometimes depended upon faulty manufacture, but very often upon the unequal pressure and cutting edges of the folds of rubber sur-

rounding the limb. He had devised a thin, hollow tube of rubber, about twenty-five centimeters (ten inches) in length, with an average width, when flattened, of eight centimeters (three inches), and of varying thickness. This can be drawn over the naked limb, prepared only by oiling it, or dusting some finely powdered starch over it. The tube should reach from the ankle nearly to the knee. It is unnecessary that the foot should be covered, unless the disease has invaded it also, in which case a longer tube, with an opening to give room for the heel, or two tubes, may be used. He showed one of these tubular bandages in position. It had been worn several days without the least discomfort; there was no tendency to undue sweating, nor to maceration of the epidermis.

The last communication of the day was in the form of a lecture, by Dr. Charles Heitzmann, of New York, on "*Microscopical Studies on Inflammation of the Skin*." This lecture, which was abundantly illustrated by sketches thrown off by the speaker while addressing the Association, was supplementary to that delivered before it last summer, at Saratoga, on "*The Behavior of Epithelium*," and was a masterly effort.

SECOND DAY.

After the usual business meeting, the public session of the Association opened with a paper by Dr. H. G. Piffard, of New York, on "*Viola Tricolor*." The fluid extract of this plant, which belongs to the pansy family, was asserted by Dr. Piffard to be efficacious as a remedy in infantile eczema capitis.

In the discussion which followed the reading of this paper, Dr. Heitzmann said the remedy was an old one, and one of a numerous class which had been in vogue in Germany since time immemorial, until Hebra dispelled the mists of darkness which hung around dermal therapeutics, and showed that these so-called vegetable specifics had no more curative effect on skin diseases than so much hay.

A paper followed, by Dr. Arthur Van Harlingen, of Philadelphia, entitled "*A Case of Chronic Inflammatory Tuberculo-vesicular Disease of the Skin*," with illustrative microscopic sections of the lesions. The last paper of the morning was by Dr. Samuel Sherwell, of Brooklyn, on

The Tattooing of Cutaneous Nævi.

Dr. Sherwell described the peculiar method devised by himself for performing the tattooing process, and described the apparatus which he had invented for the operation. The instrument consists simply of half a dozen fine glover's needles, bound together in a bundle with waxed thread, so that their points shall be one to two millimeters apart. This is used either alone or in connection with some irritating substance, as carbolic acid. Many sittings are required, and the operation is a painful one, but the results are satisfactory in all cases of superficial or cutaneous nævi. Of course, when the nævus is of considerable size and deep, and is supplied by large sinuses, this method cannot be practiced. At the conclusion of his paper, Dr. Sherwell brought before the association a female patient, upon whom he had operated by tattooing, for the re-

lief of a disfiguring nævus of the chin. The cure was not quite completed, but thus far the success was undoubted, and the result of the tattooing treatment could not fail to be ultimately satisfactory.

AFTERNOON SESSION.

Dr. W. A. Hardaway, of St. Louis, read a paper giving an account of "*A Case of Multiple Tumors of the Skin Accompanied by Intense Pruritus*." Dr. Duhring read a paper entitled "*Supplement to a Case of Inflammatory Fungoid Neoplasm*," being a continuation of the history of the case presented at the previous meeting of the Association. Considerable discussion followed the reading of this paper, the question being as to whether the disease deserved an especial name, or whether it might not be classed among the sarcomata. The last paper of the afternoon was one by Dr. James Nevins Hyde, of Chicago, giving a description of "*A Variety of Mollusum Verrucosum, Presenting Unusual Features*."

THIRD DAY.

The papers read at this, the final, session of the meeting were three in number. The first was by Prof. Jas. C. White, of Boston, on

Etiology.

The reader examined the various theories formerly, and perhaps still, prevalent regarding the dependence of diseases of the skin upon diatheses, and upon affections of the various organs, etc., and claimed for the skin the same independence with regard to the causation of disease which is allowed to other organs of the body. An animated discussion followed the reading of this paper. While all the speakers praised the skill and thoroughness with which the reader had disposed of the crude and theoretical views formerly prevalent, and still, perhaps, somewhat in vogue, by which skin diseases were regarded as the efforts of certain humors to break out of the body, or as the outward manifestations of some mysterious diathesis, yet much opposition was expressed to his views upon the independence of the skin of the diseases and ailments of the various internal organs. Dr. R. W. Taylor's paper "*On the Nature of Syphilis*," took the ground that certain minute albuminous protoplasmic bodies found in the serum of chancres and other lesions of early syphilis act as carriers of contagion. The final paper of the session was a second one by Dr. Hardaway, of St. Louis, entitled "*Obliteration of Varicose Vessels in Rosacea by Electrolysis*." Dr. Hardaway described the apparatus made use of by himself, consisting of a number thirteen cambric needle inserted to the depth of 1.5 to 2 millimeters into an opening first made in the dilated capillary, and connected with a battery of seven cells.

After a short discussion upon Dr. Hardaway's paper, the Association adjourned to meet next year in Newport, on the last Tuesday in August, 1880. The officers for the following year are, President, Dr. Louis A. Duhring, of Philadelphia; Vice-presidents, Drs. E. Wigglesworth, of Boston, and W. A. Hardaway, of St. Louis; Secretary, Dr. Arthur Van Harlingen, of Phila-

delphia; Treasurer, Dr. I. E. Atkinson, of Baltimore.

BRITISH MEDICAL ASSOCIATION—PROCEEDINGS OF SECTIONS.

SECTION OF MEDICINE.

(Continued from page 229.)

Several papers were read on

Alcohol in Fever,

Expressing quite different opinions as to its value as a medicine and accessory food.

In the discussion, Dr. Spedding (Belfast) said he had considerable experience in the administration of stimulants to children in a variety of diseases, chiefly high pyrexia and fevers. Only one speaker had alluded to giving stimulants to children, and he seemed to be rather averse to it. He had cases in which, for several days, children had not allowed one particle of nutritive food to enter their stomachs, and had lived on nothing but water and punch, made very sweet and taken cold. It had been his practice for the last eight years, in the Belfast Dispensary, to withhold alcohol till pulmonary complications appeared, about the second or third week. He thought that was the time when the use of stimulants was indicated; and then he measured the amount of his stimulants by the amount of the pulmonary complications. It seemed to act remarkably well on the heart, and also acted as an expectorant.

Dr. Smith, of Dumfries, said that in Scotland they recognized fever as a disease that ran a certain course. They found that the best method of preventing death was to support the system from the commencement of the fever; and they did not give stimulants when they found that nervous symptoms were produced.

Dr. Sinclair (Dundee) was of opinion that the other ingredients of most alcoholic fluids were not by any means to be under-estimated or ignored, as they too often were. Whisky contained none of those volatile ethers which were developed by keeping in the rich wines of France and Spain; and for this reason he objected to the administration of whisky.

Dr. Little (Dublin) wished it not to be supposed that he thought alcohol was not one of the most valuable agents they had. He had, however, thought it was potent for evil as well as for good; and that they must be exceedingly cautious in its use. He had himself been in the habit of prescribing a cup of tea in the morning, beaten up with the yolk of an egg, as a substitute for stimulants.

The President said this had been the most satisfactory discussion on a question of treatment that he had ever heard. They had gentlemen there with extreme views on both sides; and there had arisen from those gentlemen not only a convergence, but an actual conjunction of opinion as to the point of the value of alcohol in the treatment of fever. In the first place, it was apparently agreed that the patient in fever was like a ship in the storm. They could not do very much for the storm: but they could do a great deal in steering the ship in the storm. The main object was to support the life of the

patient in passing through the storm of fever. In the next place, when the patient began to fail, and death was threatened, perhaps the best remedy was alcohol. It was also agreed that circumstances arose in the course of the fever, and pointing to failure, perhaps not only was alcohol a successful, but it was the only successful means which they could employ; and that, when they gave alcohol, they must give it with a sparing or with a tentative hand; and so long as certain evidences of disagreement did not arise; so long as the tongue was not dry, as the pulse was not increased; so long as no suppression of urine, and as no increase of delirium occurred; and so long as the patient felt comforted and quiet, they might go on with the idea that they were assisting the patient in arriving at a happy termination of the disease.

Dr. Morell Mackenzie then read an article on

Laryngeal Phthisis,

of which the following is an abstract:—

1. Laryngeal phthisis is due to the presence and subsequent breaking down of tubercles in the mucous and sub-mucous membranes. The tubercles, some very small and some as large as a millet seed, are found imbedded in a reticular structure, filled with small, round lymphoid cells. This tubercular matter is sometimes deposited uniformly through the thickness of the mucous membrane, but much more commonly it is found in the most superficial layer of the mucous membrane, immediately beneath the epithelium. 2. Laryngeal phthisis is essentially a secondary phenomenon, occurring as a sequel to pulmonary phthisis. There is no evidence that any case of *primary* laryngeal phthisis has ever existed. 3. The disease is not due to the corrosive action of the sputa. 4. The disease is much more common among males than females. Out of 500 cases examined by the author during life, 365 were males and 135 females. In a hundred necropsies, there were 73 males and 23 females. 5. The most frequently present symptom of laryngeal phthisis is impairment of the vocal function. In 500 cases the voice was impaired 460 times. Cough was a marked symptom in 427 patients. Dysphagia occurred 151 times. 6. The naked eye appearances of laryngeal phthisis, either during life or after death, cannot be absolutely relied upon, but pale pyriform swellings of the aryepiglottic folds, and a pale, turban-like thickening of the epiglottis, are seldom met with except in laryngeal phthisis. More or less uniform thickening, with marked pallor, of the mucous membrane, and small scattered ulcers, are the characteristic features of the disease. 7. The prognosis is always unfavorable, the ordinary duration of life after the throat symptoms have become troublesome being from twelve to eighteen months. 8. The only treatment which is of any use consists in the employment of palliative remedies. Where there is pain in swallowing, insufflation of morphia gives the greatest amount of relief.

A number of papers were read on

Tracheotomy in Croup.

One of these, by Mr. W. Thompson, of Dublin, gave a short account of six cases in which he had operated, with two successful results. He discussed the subject under two heads: 1. Under

what circumstances ought the operation to be performed? 2. What conditions will tend to insure its success? He expressed his belief in medication in the early stages; but when a membrane was present he believed that the treatment should be by emetics; and failing success, that tracheotomy ought to be performed, provided that urgent symptoms were present—such as the sinking in of the substernal tissues and of the parts at the root of the neck. He regarded the operation as simply relieving an urgent mechanical obstruction, thus preventing the poisoning of the patient by carbonized blood, and giving time for the use of other remedies, if necessary. He advocated the suprathyroid operation, as being quite as efficient as the infrathyroid, while it was less difficult. Steam spray, a full-sized tube, careful nursing, and the spraying of the trachea occasionally with lactic acid solution or lime water, were regarded as important helps to success.

The propriety of the operation in certain cases was generally recognized.

Mr. Corley stated that he regarded the operation as one of the most serious—he did not say the most dangerous—in surgery. Of the dangers, shock was a necessary concomitant; congestion of the lungs or bronchitis from contact of the cold air with the pulmonary mucous membrane, if it existed, was quite avoidable. The immediate and complete oxygenation of the blood which followed a free opening in the trachea, the consequent resumption of the vital functions, and the cessation of the exhaustion and ineffectual struggles for air, justified any risks incurred in performing the operation. As to the proper time for operating, much stress was laid, in the hospital with which he was connected, on substernal sinking in respiration, which showed that the lungs were not descending while the diaphragm was contracting.

In a paper by Dr. E. T. Tibbets, on

The Action of Digitalis.

the author believed that digitalis was strictly a cardiac sedative and a general depressant, and that it did not, as a rule, increase arterial tension. Apart from the experiments and clinical observations previously alluded to, he arrived at the following results: 1. Small doses, *e.g.*, one to two drachms of infusion, three times daily, are quite sufficient to produce nausea and even vomiting. 2. One-sixtieth of a grain of digitaline dropped into the eye produces dilatation of the pupil. 3. Its action in many ways is identical with that of tobacco, aconite, lobelia, etc. 4. No example is recorded of its ever having produced a hard, powerful pulse and general vascular excitement. 5. Its diuretic action is probably due to dilatation and not to contraction of the small vessels. The present modern theory the author believed to be dangerous. The sphygmographic observations made with regard to arterial tension he considered open to many fallacies. As one result of these observations, digitalis had been recommended in fatty degeneration of the heart, which the author regarded as injudicious as the administration of opium to a patient suffering from uræmic drowsiness.

Dr. A. Harkin spoke of the

Treatment of the Hemorrhagic Diathesis.

He observed that in this diathesis, which is characterized by a diminished proportion of fibrin, a soft clot, an absence of the buffy coat, accompanied with a delicacy of structure in the capillaries and minute vessels, a remedy is required that shall increase the fibrin, add to the plasticity and chemico-vital elements of the blood and restore its coagulating power, as well as the contractile action of the capillaries; and thus destroy the dyscrasies, in which a slight wound may lead to excessive hemorrhage, a trifling contusion to extensive extravasation. That this salt, whether given alone or in combination with iron, possesses the very desirable property of controlling the various developments of the hemorrhagic diathesis, and that its persevering administration will neutralize the constitutional taint on which these ailments depend, Dr. Harkin hoped to establish by the relation of satisfactory cases, selected from an experience of its value extending over more than twenty years' observation. He generally ordered the medicine in the form of one ounce of a saturated solution three times daily, one ounce of the salt to a pint of water; and if iron be required, an addition of one drachm of the muriatic tincture to the solution completes the mixture. Administered in this proportion, Dr. Harkin had had the greatest satisfaction in the treatment of epistaxis; in hæmophilia; in hemorrhage from the bowels, from the kidneys, from the lungs, from the stomach; in menorrhagia; in scurvy; and in purpura hemorrhagica.

Dr. Octavius Sturges spoke of

Chorea as a Functional Disorder.

His paper was designed to show, from an examination of the ordinary phenomena of chorea, that the affection in its simple and uncomplicated form is not due to any lesion which is demonstrable anatomically; and that its symptoms are not otherwise to be explained than by reference to the general character of disturbed muscular movement, when the source of such disturbance is, directly or indirectly, a mental impression. This position it was sought to maintain by reference to (1) the age and sex of the patients; (2) the actual character and common association of the affection; and (3) the modifications it undergoes at the various periods of life.

Papers were presented on

Albuminuria.

One by Dr. R. Saundly, on the "Apparent Presence of Albuminuria in Healthy Persons." He thought paraglobulin was sometimes mistaken for albumen.

Dr. C. R. Drysdale read on "Syphilitic Albuminuria." He said that no matter what treatment had been made use of, he had found that, in certain cases of syphilis, a fatal termination occurred by the insidious commencement of nephritis, usually far on in the disease, but occasionally arising precociously, or within a year after infection. The latter was, however, very rare indeed. The morbid anatomy of syphilitic albuminuria may consist of diffuse inflammation of the cellular elements of the kidney, which, as in the case of syphilitic cirrhosis of

the liver, spinal cord, etc., leads to the destruction of the secreting cells, and ultimately to fatty degeneration of the organ. In some cases circumscribed gummy inflammation forms small tumors in the substance of the kidney. The disease usually commences silently, is accompanied by anasarca, and may end in death from asthenia or in coma. The diagnosis is made out by the history of the case, and is often quite clear; but even when the history is indistinct, assistance may be gained by noticing whether there are any scars on the liver after death. Dr. Drysdale gave the clinical history of an acute case of syphilitic nephritis occurring in a young man, aged twenty-eight, with large rupia sores recently cicatrized, and with a short history of

infection ten months before. He rapidly sank and died.

Dr. Churton, of Leeds, spoke of

The Perignosis of Patients.

He informed his audience that the word "perignosis" meant knowing about the patient, his circumstances and surroundings, and especially the disordering influences to which he had been exposed, both recently and during his former life. The importance of this knowledge in practice, and the difficulty of obtaining it, were alluded to. The mode of examination was described, and appended to the paper were printed forms used in the Leeds Dispensary.

EDITORIAL DEPARTMENT.

PERISCOPE.

Treatment of Eczema.

The following directions are given by Dr. J. B. Bradbury, in the *Lancet*:—

Cases of acute eczema speedily recover if the patients are placed upon an unstimulating diet, and have soothing applications to the skin. In acute general eczema the alkaline and bran baths are very valuable, and local applications of olive oil and lime water (the *Linimentum calcis* of the Pharmacopoeia), or lead lotion. When the disease has somewhat subsided, the internal administration of arsenic and the local application of zinc ointment hasten the cure. In the case of a gentleman I saw in consultation, who was gouty and had albuminuria, colchicum with magnesia quickly removed the malady. These remedies are also very valuable in chronic eczema occurring in persons of a gouty habit. Indeed, in eczema, as in all diseases, the importance of looking for some diathesis cannot be over-estimated. A disease often resists cure till such constitutional vice has been discovered and corrected. A short time ago I cured a gentleman of gouty eczema with liquor potassæ in thirty-minim doses, given with compound infusion of gentian, three times a day.

In chronic eczema of the hands arsenic almost invariably does good, and as a local application, the diluted nitrate of mercury ointment. For eczema of the axilla, which is frequently accompanied by boils, the internal administration of the perchloride of mercury, and the local application of mercurial ointment, are almost a specific. I have cured two cases of this kind which had resisted all other treatment. The combination of iron with sulphate of magnesia is most valuable in the treatment of eczema in anæmic young women with constipated bowels. The dose of sulphate of iron should be larger than that usually given. I give three- or four-grain doses. In anæmic young men the tincture of perchloride of iron, in at least half-drachm

doses, answers better than the sulphate. I quickly cured a medical student of chronic eczema of the legs by this treatment, when other remedies prescribed by a specialist had failed. In chronic eczema of the face an ointment of equal parts of white precipitate ointment, and either zinc or compound subacetate of lead ointment is very useful. Sometimes, especially where the hairy parts are affected, the dilute nitrate of mercury ointment succeeds better. In eczema of the lips a private patient has derived great benefit from an ointment composed of almond oil, yellow beeswax, new honey, and oxide of zinc, a formula which I obtained from a paper by Dr. Durkee, in the *Journal of Cutaneous Medicine*. I have cured two cases of eczema of the nostrils by the application of dilute nitrate of mercury ointment. This ointment is best diluted with vaseline. Preparations of tar are of great use in some cases of chronic local eczema, but English skins are not so tolerant of these remedies as German skins.

Patients subject to chronic eczema should, as a rule, avoid salt meats, soups, sweets, acids, fruits, pastry and raw vegetables.

Eczema in young children is frequently a very troublesome malady, probably owing to the disturbing influence of dentition. In children a few months old, where the disease is syphilitic, I give gray powder night and morning, and apply a mercurial ointment. When the disease has somewhat subsided, I give the syrup of the iodide of iron. The perchloride of mercury has disappointed me in these cases. In non-syphilitic eczema, after correcting any error in diet, and attending to the state of the secretions, I prescribe the ferro-arsenical mixture of Mr. Erasmus Wilson, and apply the zinc ointment, and generally with the happiest results. I have recently cured three cases of eczema of long standing, which had resisted all previous treatment, by this method. It is very important in this, as in all forms of eczema, that the treatment should extend over a considerable time, in some cases six months. In eczema of the scalp, and generally in impetiginous eczema, after the

removal of the scabs by poultices and oil, the local application of the *unguentum hydrargyri cum plumbi* of the Skin Hospital is invaluable. Eczematous children are almost invariably benefited by cod-liver oil.

Treatment of Fistulae and Scars of the Cheek.

On this subject Mr. Edward Bellamy, F.R.C.S., writes to the *Lancet*—

It is, in the first place, all-important to find out exactly the course taken by the fistula or fistulae—a matter of considerable difficulty sometimes; and the following classification may have its value in diagnosis: 1. Those opening into the cheek, with a track above the level of the buccal or labial mucous membrane, and which usually discharge saliva only. 2. Those whose track lies below this level, and which discharge pus and muco-purulent fluid and no saliva. 3. A complication of both forms, and which discharge both pus and saliva. With regard to the accurate detection of their course, an ordinary probe frequently gives merely a general idea of the direction, without passing into the offsets. I have always found that a fine filiform bougie, or better still, a fine india-rubber French bougie, is more useful than anything else. After having determined the course, irritating cause, and condition of the fistula, in order to avoid further scar, the dead bone, if there be any, is to be removed by delicate but strong forceps or gouge, and afterward the track should be washed out with a very strong solution of sulphuric acid, which has the effect of completely destroying the fistulous track; or by the introduction of minute crystals of nitrate of silver, until the granulations appear at the orifice, gentle pressure being maintained. A cicatrix, however carefully the treatment be carried out, is sure to remain, unsightly always and often troublesome, appearing as a "pucker" or adhesion to the underlying bone; and with regard to its treatment, I venture to state, from my own experience, that two methods are open to the surgeon, dependent on the extent or strength of these adhesions. The first consists in introducing a fine blunt-pointed tenotome through the tissue of the cicatrix—laminating it, as it were—taking great care to leave it in free communication with the integument adjacent to it; next, to introduce between the split surfaces a thin strip of sheet-lead, which should be kept in, to prevent the adhesion of the surfaces divided by the tenotome. After a few days, the superficial lamina of the cicatrix may be subjected to gentle movement over the lower lamina, which the patient may conduct himself; this prevents adhesion, and renders the tissue pliant and assimilative. This may be termed the "passive movement" of the cicatrix. The second plan, if the former fails—or indeed it may be advisable at first—consists in dissecting away the adherent tissue entirely, vivifying the edges of the cicatrix and bringing them together by means of fine entomological pins, and so gaining a mere linear scar at worst, care being taken, by movement, to prevent permanent adhesion. The great elasticity of the cheek structure permits of this without any deformity resulting as regards expression. Manipulative skill is necessary for success, but

results appear so satisfactory that I am inclined to think that, in cases where it is important, for the sake of the patient's looks, operative proceedings should be undertaken, the above suggestions may be of use.

Therapeutical Value of Drug-Smoking in Asthma.

On this subject Dr. R. E. Thompson writes to the *Practitioner*—

The leaves should be procured in good condition, and perfectly fresh; they should then be soaked in a solution of nitre (25 per cent.), and the leaves then dried by gentle heat and powdered. I have made use of the various neurotics in this manner, in asthma, first separately, in order to ascertain the individual value of the remedy, and then in combination, and the experiments have now been carried on for many months, and I am disposed to place them in the following order of merit: opium, stramonium, cannabis indica, conium, lobelia.

The three first on the list appear to be the most potent by fumigation, but when administered in the wet method (if I may use the term) cannabis indica is so uncertain and so apt to produce delirium, especially in women, that I prefer conium, a drug from which I have obtained extremely good results, when administered by the mouth.

With belladonna I could not satisfy myself that any good results were to be obtained by fumigation, and I consider it far inferior to those given above, in whatever way it is administered.

The powder may be used by those patients who are not accustomed, or object, to smoking cigarettes, or it may be added to the tobacco of those who prefer the use of the pipe.

As regards the composition of the powder, I have had good results from gr. ix of stramonium and gr. j of cannabis indica, this being a quantity, which will cover a shilling, sufficient for one fumigation.

But if the patient does not object to smoking I much prefer to administer the remedies in the form described in my previous paper, namely, paper cigarettes impregnated with tinctures, so that the dose may be accurately apportioned.

It will be understood that in suggesting remedies which serve to alleviate the spasmodic dyspnoea of asthma, I do not consider that they constitute a mode of treatment calculated to improve the general condition of the patient, or that they are more than palliatives of an urgent symptom: constitutional treatment by ferruginous tonics and cod-liver oil, or it may be by iodide of potassium or arsenic, must be resorted to, if it be intended to give the asthmatic patient permanent relief from distressing disease. With acute conditions of the disease, with bronchial complications of such a nature as to contraindicate the use of iron, there is probably no treatment better for a majority of cases than the use of iodide of potassium with stramonium; in many cases of like character I have derived very good results from the administration of hemlock in combination with the hypophosphite of soda, but for the prevention of the disease I know no treatment to compare with iron and cod-liver oil.

But for soothing and diminishing the dyspnea, neurotics may be used with great effect; and the following combination is that which, up to this time, has given me the best results.

The same form of cigarette is used as described in my former contribution on this subject, and the paper is soaked in the following drugs, according to the recipe here given:—

Extract of opium,	gr. $\frac{1}{2}$
Extract of stramonium,	gr. $\frac{1}{2}$
Tincture of Indian hemp,	m $\frac{1}{2}$
Tincture of hemlock,	m $\frac{1}{2}$
Tincture of lobelia,	m $\frac{1}{2}$
Tincture of tobacco,	m 9
Oil of anise,	m $\frac{1}{2}$
Nitre,	gr. $\frac{1}{2}$

Or for a sheet of Swedish paper sufficient to make sixty-four cigarettes, the formula may be given thus:—

Tincturæ tabaci,	3 x
Tincturæ conii,	3 ij
Tincturæ lobeliæ,	3 ij
Tincturæ cannabis ind.,	m xxxij
Extract. opii,	gr. j
Extract. stramonii,	gr. ij
Olei anisi,	m viij
Potassæ nitratis,	gr. xvj
Spir. v. r. ad,	3 iijss.

This formula, which is a complex one, has only been obtained from repeated experiments, leading step by step to the addition of some effective remedy and omission of less useful ones.

What is Malaria?

The *Practitioner* quotes, on this subject, the recent researches of Professor Klebs and Signor T. Crudeli. They say—

The organisms which, according to our observations, are to be regarded as the true causes of malaria, since they are to be found in the infective liquids obtained by the earth from the air, and by cultivation, as in the bodies of infected animals, belong to the genus *bacillus*. In the soil of malarious regions they are found in the form of numerous spores, which have the power of independent motion, and strongly refract the light. They have an elongated oval figure, and a maximum diameter of 0.95 micro-millimeters. They develop, either within the body or in cultivating apparatus, into long filaments, which at first are homogeneous. Later on, these filaments undergo transverse fission, which converts them into a chain, and in the interior of each link new spores develop. The first formation of these spores is parietal, but finally, almost the whole interior of the link becomes filled with these little bodies. This morphological property seems to correspond to a particular species of bacillus, which we propose to call *Bacillus malaricæ*, since we have seen it develop within the bodies of animals infected by malaria.

In regard to the biological properties of this plant, we may mention besides that it requires for its development the presence of free oxygen, and perhaps it belongs to Pasteur's class of *aerobii*. It does not develop in water, but does so in liquids rich in nitrogenous substances, such

as solutions of gelatine or albumen, in urine and in liquids of the organism. Its greatest development in the body of infected animals occurs in the spleen and medulla of the bones, which in some of our cases contain long and homogeneous filaments, which measured 0.06–0.084 millimeters in length, and .0006 millimeters in diameter. This circumstance is noteworthy, since it is precisely in these organs that the most characteristic anatomical alterations are to be found, in consequence of grave malarious fevers in man.

The editor of the *Practitioner* adds:—

These researches by Klebs and Tommasi-Crudeli go far to decide the controversy which has long raged regarding the origin and nature of malaria, and to settle this vexed question in favor of malarious poison being a vegetable organism of low origination.

Disease from a Kiss.

Dr. R. L. Payne, of North Carolina, calls attention, in the *North Carolina Medical Journal*, to the danger of conveying disease by kissing. He would do away with this custom. He gives this case and comments:—

A young man came to me with a neglected case of pox. He was already in the secondary stage of the disease, and among other symptoms which presented, had several mucous patches upon his lips and within his mouth.

He had a little cousin, a girl child of sixteen months of age, who was still at its mother's breast. They were very fond of each other, and he was frequently in the habit of fondling and kissing the child.

Of course, I knew nothing of this intimacy, or I should have warned him of the danger. Some weeks after this I was called to visit the child and its mother. I found the little one with enlarged cervical glands, sore mouth, sore eyes, etc., and its mother said to me, after I had prescribed for the child: "Doctor, please look at my nipple, I believe I am going to have cancer of the breast." Her nipple was sore indeed, and her axillary lymphatic glands were enlarged and indurated, not from cancer, however, but from a characteristic chancre.

I treated them all for syphilis, and the good results of the treatment verified my diagnosis. I have seen many similar cases during the last twenty-five years, and many more might be cited from the authorities upon this loathsome disease, but the above are sufficient for my purpose.

Very many other diseases may be conveyed by the act of kissing, and I might go on at length enumerating them, and adducing "confirmations as strong as proof of Holy Writ;" but my object is simply to call attention to the truth which lies in this direction, and to testify most solemnly against a practice so fraught with danger, so pregnant with death!

The act of kissing is never, under any circumstances, indispensable, and the indiscriminate practice is not only unnecessary, but is also foolish, dangerous, and very often insincere.

Ah, yes; many an insidious kiss has been given since the days of Judas! Then, why longer indulge in a custom so empty, so meaningless, but yet so potent for evil?

Catgut as a Vehicle of Infection.

In No. 12, 1879, *Centralblatt für Gynäkologie*, quoted in the *Edinburgh Medical Journal*, Prof. Zweifel, of Erlangen, records a case in which infection resulted from the raising of the edges of an extremely small fistulous opening, which had remained after an operation for transverse obliteration of the vagina. In the case referred to the knife, needle, and hooks were carefully disinfected in a 5 per cent. solution of carbolic acid. The edges were brought together with catgut sutures. Septicæmia and death followed this operation, and the post-mortem examination clearly proved that the death was due to a recent infection starting from the pelvis. The bottle of catgut from which the threads were used on this occasion was then examined, and found to contain bacteria. In other two specimens of catgut examined by Zweifel a countless number of microscopic creatures were seen wriggling between the lamellæ of the catgut. Zweifel considers it as nearly certain that the catgut was the source of infection in the above case, and thinks it absolutely necessary that each bottle of catgut should be subjected to careful microscopical examination before being used. He points out that if the catgut bottle is not securely corked, the carbolic acid gradually evaporates from the oil, more especially if the bottle is kept in a warm room. Zweifel is more inclined to explain the occasional appearance of putrid catgut in this manner, than to believe that it may have been produced from the intestines of putrid animals.

Trigeminal Neuralgia of Long Standing Cured by Aconitia.

Dr. Robert F. Weir, Surgeon to the New York and Roosevelt Hospitals, gives this case in the *Archives of Medicine*, Aug., 1879:—

Peter Derken, aged 38, a German, was first seen April 15, 1879, in consultation with Dr. W. T. Alexander. The patient had had severe neuralgia for eighteen years, affecting principally the distribution of the infra-orbital nerve of the left side of the face, with the paroxysm recurring nearly every minute. Sleep has been obtained by use of chloral and opium.

Eighteen months since the nerve was divided at its point of emergence on the cheek, and half an inch of it removed by Dr. A. B. Mott, of this city. As a result of this operation the pain was absent for three or four months, when it recurred, and it is now more marked in the parotid and temporal regions and along the teeth of the upper jaw. The neuralgia has lately affected the teeth of the lower jaw also on the same side.

Aconitia was advised as worthy of a trial prior to resorting to the removal of the remaining deeper portion of the nerve, and Duquesnel's preparation gr. $\frac{1}{15}$ (obtained at Neergaard's), was exhibited three times a day, which, on the 17th inst., was increased to gr. $\frac{1}{4}$ *ter die*. After the second dose of this strength the patient felt slight coldness over the body, with moderate tingling sensations. No effect on the neuralgia was, however, noticed, and on the 19th four doses of gr. $\frac{1}{4}$ each were given, without any physiological effect, though the pain was made

easier, so much so that the patient slept the next night without any anodyne.

April 25th. Has now increased the doses of aconitia to seven per diem, each being gr. $\frac{1}{4}$. No physiological effects have been produced by the remedy, except occasionally a slight chilliness. The amelioration of the pain is most marked. He feels it only moderately in the lower molar in the afternoon. It soon left him entirely.

REVIEWS AND BOOK NOTICES.**NOTES ON CURRENT MEDICAL LITERATURE.**

—In a pamphlet of "Notes of Hospital and Private Practice," Dr. Henry Gibbons, Sr., of San Francisco, gives tersely the most efficient means he has found in the management of a number of common diseases.

—Dr. Nathan Bozeman, of New York, has published, through William Wood & Co., the results of eight cases of ovariectomy, of which seven were successful. He details at length the preliminary and after treatment he prefers, and the steps of the operation.

—Several new medical journals are announced. Among them are a semi-monthly, under the charge of Dr. Dudley, of Chicago, and a quarterly, under that of Dr. C. H. Hughes, of St. Louis. The latter will be entitled "The Alienist and Neurologist," and will be devoted, as its title denotes, to psychiatry and neurology. Dr. Hughes was formerly Superintendent of the Missouri State Lunatic Asylum, and has contributed, from time to time, various valuable articles on his specialty, to current literature.

—With a clear and broad appreciation of the true position of medical men in the community, Dr. D. N. Kinsman, Professor of the Practice of Medicine in the Columbus, Ohio, Medical College, has made a careful original study of the destructive disease among swine, known as "Hog Cholera." He states that \$20,000,000 are lost annually by this disease in the United States. From his investigations, he concludes that it is no form of anthrax, nor yet of typhoid fever, but a specific, contagious disease, peculiar to the species. Extensive peritonitis is always present. The essay deserves very general attention.

—Dr. E. Seguin sends an address read before the British Medical Association, at Cork, on his favorite topic, the Metric System. He briefly stated the progress it was making. Following his address, on the proposition of Mr. Ernest Hart, editor of the journal of the Association, a committee was appointed to report on the means

of introducing the metric system in medicine in Great Britain—Dr. Clifford Albutt, of Leeds; Dr. Lauder Brunton, F.R.S.; Dr. Sieveking; Prof. Frazer, Q. V., Edinburgh; Prof. Harvey, University of Aberdeen; Dr. Quain, F.R.S., Chairman of the Pharmacopœia Committee of the General Medical Council, and Mr. Ernest Hart, Chairman of Council.

—"Dermatitis Venenata" is the term applied by Dr. Roswell Park, of Chicago, to the cutaneous eruption caused on many persons by various species of rhus, notably the *R. toxicodendron* and *R. vernix*. His essay, which is quite an exhaustive one, is a reprint from the *Archives of Dermatology*.

—Many persons go through life with a squint that is a deformity, and finally an injury to their visual powers. In a recent reprint Dr. J. J. Chisholm, of Baltimore, urges the advantages, the ease and safety of the operation required to relieve them. He says: From the present status of ophthalmic science I know of no operation in the whole domain of surgery which gives more satisfactory and permanent good results than the scientific operation for squint. In the very large majority of cases, a few weeks after the operation it is impossible to see that any defect in the position of the eyes had ever existed.

—Of all the deaths that occur in civilized countries nearly one-fourth are those of infants less than one year old. Nearly one-half of all deaths are those of children less than five years old. In view of this sad fact the Wisconsin State Board of Health has this summer distributed largely a series of instructions on the care of infants and young children. They are carefully prepared. Among other facts the circular states that the popular idea that the second summer is the most dangerous to the life of the child is fallacious; it grows, doubtless, in part, out of another and dangerous popular idea, that diarrhoea is a natural and almost necessary attendant upon "teething," and that it is wrong to check a diarrhoea which occurs during this process. At the very commencement of any such disorder in children it should be controlled, and this may very often be done by observing the rules given, and without medicine.

BOOK NOTICES.

Transactions of the College of Physicians of Philadelphia. Third series. Volume IV. Philadelphia, Lindsay & Blakiston.

This volume contains the Transactions from

the summer of 1877 to the summer of 1879. We have printed in the *REPORTER* sufficiently full accounts of the papers read before the College, so that we need not recall them here.

The volume is well printed, and can be obtained of Messrs. Lindsay & Blakiston, of this city.

The Student's Guide to the Diseases of Women. By Alfred L. Galabin, M.D., Lecturer at Guy's Hospital. Illustrated. Philadelphia, Lindsay & Blakiston, 1879.

In the compass of 350 small octavo pages the author of this work gives an epitome of what a student will find it most essential to learn about diseases of women. He necessarily omits much, as, for instance, almost nothing is said about gynecological operations, nor about the diseases incident to the pregnant state. It is, in fact, no longer possible to do justice to the subject in so brief a space; but with this disadvantage to contend with, and having in view the wants of students only, Dr. Galabin has succeeded as well as any one could expect him to, exercising good judgment in his selection and treatment of topics.

Physiology and Histology of the Cerebral Convulsions. Also, *Poisons of the Intellect.* By Charles Richet, A.M., M.D., of Paris. Translated by Edward P. Fowler, M.D. New York, Wm. Wood & Co., 1879. 8vo, pp. 170.

The first of these essays includes a full and minute description of the structure of the cerebral convulsions, their development, physiology, physiological properties and their functions. Numerous illustrations are inserted, to render the text more clear, and there is every indication that both original study and a conscientious use of authorities have been summoned to the aid of the author. This is further shown by a bibliography which is added, but which is by no means complete, and we presume only includes works which have been read by the author.

The second essay is called, on the title page of the book, "*Poisons of the Intellect*," and at its commencement "*Poisons of the Intelligence*." These words do not mean the same, and both of them are singularly incorrect and inappropriate. What they refer to is the action of the stimulant narcotics, alcohol, chloroform, haschisch and coffee. It was not worth while to translate this paper. It is trite and superficial, and reads as if it was prepared for the instruction of a village lyceum, rather than the scientific world.

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**THE PRINCIPLES AND PRACTICE OF
 LITHOTRITY.**

The REPORTER of January 11th, 1879, contained a communication from Dr. Reuben A. Vance, of Cincinnati, Ohio, entitled, "The Principles and Practice of Modern Lithotripsy, and the Recent Issues by which They are Imperilled;" a paper originally read before the Tri-States Medical Society at Springfield, Illinois, November 12th, 1878, and one which attracted no little attention at the time of its first appearance. In this article Dr. Vance described briefly, but accurately, the changes initiated in the bladder when that organ contains a calculus, and spoke of the necessity for measures looking to the control of the inflammatory action it has excited, as well as for those requisite for the removal of the stone; of the two elements which the problem of removing the stone presents—the one, the stone itself; the other, the state of the bladder. For the success of lithotripsy, the irritability of the bladder and the urinary passages must be reduced to the minimum; this is the most important preliminary step to be taken by the surgeon. Next,

the general health of the patient is to be improved to the maximum; this measure is also essential. In a word, Dr. Vance says that in the case of a patient suffering from stone, with whom it would be reasonably safe—so far as the other bodily organs aside from the bladder are concerned—to perform any capital operation, no surgeon can properly decide against giving him the relief lithotripsy affords, until both these measures have been adopted. A moment's glance at the contra-indications of lithotripsy show why these steps should be taken. In general terms, stricture of the urethra, hypertrophy of the prostate, atony or paralysis of the bladder, sacculatation or carcinomatous degeneration of the vesical walls, villous tumor of the *bas fond*, and renal disease, are the most serious obstacles to lithotripsy. By adding to this list multiple calculi, and calculi too large or too hard to be crushed, we embrace all the special contra-indications to this operation. Now, it is a well known fact, that judicious measures can often increase the calibre of the urethra, reduce swelling of the prostate and restore power to the contractile walls of the bladder; in brief, materially modify or completely remove those contra-indications to lithotripsy due to the state of the urinary passages, and indirectly influence to an almost equal degree the objections to that operation which arise from the number, resistance and size of the calculi themselves. Therefore, while the measures adopted for the relief of the patient must vary with the special circumstances of the individual case, yet no one should be denied the advantages of lithotripsy until a careful study of the phenomena of the given case show that there are contra-indications, which can neither be modified nor removed, fatal to the success of the operation. "Good surgery and the dictates of humanity," continues Dr. Vance, "pronounce in favor of the painless and safe procedure by which the stone is crushed, and reserve for peculiar and exceptional cases the less tedious and more brilliant operation, in which the bladder is cut open and the stone removed at one sitting, as in lithotomy." Reference is then made to the discussion at the Medico-Chirurgical Society of London, reported

in the *Lancet*, of March 16th, 1878, which followed the reading of Sir Henry Thompson's paper presenting an "Analysis of 500 Cases of Stone in the Male Adult." Sir James Paget said that were he recommending an active surgical practice, he would begin with lithotomy, and reserve for lithotripsy only those few cases in which the calculus could be got rid of in two or three sittings. He further announced that he regarded lithotripsy as hardly susceptible of additional improvement, and yet its results were often incomplete and unsatisfactory. Even Sir Henry Thompson partook of the prevailing feeling, and stated that in his last one hundred cases he had been drawing the line more closely, and reverting to lithotripsy in a larger proportion of cases. With such statements before him, it is not surprising that Van Buren concludes that "the general tone of the discussion was not very favorable to lithotripsy," especially when Thompson finally plead for an extension of the line, so as to include cases "where the stone might be crushed at three or, at most, four sittings," beyond which point "he should mostly prefer to cut." No new objections to the operation were urged as grounds for these views. On the contrary, the strongest points against lithotripsy were on account of the cystitis "due to the injury done the mucous membrane by sharp fragments of stone and by continued instrumentation," the atony liable to be developed by it in old people, with a continuation of vesical irritability and phosphatic deposits, and the liability to overlook minute fragments, and the consequent unsatisfactory results. With a more complete exposition of the principles upon which is based the modern operation for crushing and removing calcareous matter from the human bladder than we have outlined, taken in connection with the utterances of the eminent surgeons whose names have been mentioned, Dr. Vance inquires if he is not right in thinking that the new issues thus raised are not calculated to do injustice to lithotripsy as a surgical operation, and imperil the operation by which the majority of adults suffering from stone are entitled to look for safe and painless relief? Must the body of the profession the world over, he further remarks,

be bound by conclusions derived from the practice of a few illustrious surgeons? May not London specialists enjoy a practice not truly representative, and must the profession resign itself to the statement that lithotripsy is only applicable to the comparatively limited class of cases in which the calculus can be crushed "in three or, at most, four sittings?" Dr. Vance then answers these questions, by referring to the great prevalence of Bright's disease in Great Britain, and even on our Atlantic seaboard, as compared with the comparative rarity of that affection in the Mississippi Valley, as an element that would alone suffice to impair the value of an analysis based simply on number and fatality of cases. A second, and far more potent influence in the same direction is the fact that notoriously bad cases, and those generally the most neglected, occur among wealthy men, whose means enable them to employ whatever lithotritist they may chance to want.

A New York surgeon takes occasion to refer to this "new departure" in the operative surgery of the bladder, foreshadowed by the paper of Thompson, and inaugurated by the discussion at the Medico-Chirurgical Society, and (Van Buren, in *Record* of September 28, 1878) grants the validity of the objections, but doubts the necessity of recurring to lithotomy as the only remedy, and asks: "Cannot lithotripsy be rendered less imperfect?" To this question he responds, that "there is reason to believe that a discovery has been made by an American surgeon which may take away from lithotripsy its chiefest objection, and it may prove that, as an operation, it is susceptible of improvement." Van Buren thinks the evidence adduced by Bigelow goes far toward the demonstration of "a tolerance by the bladder of protracted manipulation which has not been hitherto recognized," and publishes cases sustaining the principle announced by Bigelow. Now Dr. Vance, while disposed to accord a certain amount of value to this method of removing calculi in proper cases, doubts the novelty of Bigelow's proposition, and refers to operations by Civiale and Heurteloup, in which the same principles

are clearly discernible. The author of the editorial in the *Record* of August 16, 1879, gives a good idea of the valuable features in Bigelow's contributions to lithotrity, and traces the growth of the measure from a simple improvement of the appliances for washing the bladder, at a time when he crushed without washing, through his first few operations, in which he both crushed and washed, to the perfection of his plan, and its application to the cases in which he crushed the stone and washed out all the fragments at one operation—lithotrity at a single sitting. Vance claims that Bigelow's plan, instead of being applicable to the vast majority of cases susceptible of relief by lithotrity, is, in fact, applicable to but a small minority of such cases. He furthermore believes that Van Buren's question, "Cannot lithotrity be rendered less imperfect?" is not to be answered in the manner that surgeon imagines. On the contrary, it is by the careful study of individual cases, and the judicious application of certain principles deduced therefrom, that the usefulness of that procedure is to be extended, and lithotrity rendered a painless and successful operation. While Bigelow's plan may do in cases where the stone is small and soft, the bladder free from inflammation, and the passages healthy, yet the patients suffering from stone who present this combination of favorable circumstances are but seldom met with. On the contrary, even if the stone is neither large nor hard, yet the bladder may be involved, the prostate enlarged, the urethra contracted or rendered unduly sensitive; and some complication of this kind is present in the vast majority of cases. In view of this fact Vance claims that the improvement of lithotrity depends upon a combination of many circumstances, and the adoption of measures which may vary with different cases. In order to develop to the utmost its applicability, and render it available for the relief of the largest number of sufferers from stone in the bladder, it is essential that—

1. Preliminary treatment should be adopted every case, for the purpose of—

(a) Improving the patient's general health ;

(b) Removing genito-urinary complications; and

(c) Recording the patient's temperature, and determining his susceptibility to remedial agents, especially those which act upon the bladder.

2. In this way the surgeon is supplied with a chart by which to guide his steps during the operation, and furnished means to control vesical irritability, or subdue inflammation, should such complications arise, while

3. The temperature record furnishes him an invaluable guide to the frequency, extent and duration of the crushings.

Two other points—the study of the operation so as to develop its capabilities to the utmost, and the accumulation of experience on the part of the individual operator—were mentioned in this paper, but not dwelt upon to any extent. The three headings above quoted include the points interesting to both surgeon and patient. If a careful attention to the patient's general health, and special measures for the relief of genito-urinary complications, tend to remove a sufferer from stone in the bladder out of a class for which the relief that surgery affords is a dangerous and desperately painful procedure, and into one susceptible of cure by measures that are free from danger and devoid of pain, then, surely, too much attention cannot be devoted to these subjects. Furthermore, if, in addition, a record of the patient's temperature (taken in the rectum every six hours), and a determination of his susceptibility to remedial agents, especially those acting on the bladder, supply the surgeon with a chart, as it were, by which he can guide himself during the critical stages of the operation, and check the earliest manifestations of vesical irritability, or local inflammation, it is hard for one to estimate correctly the influence these simple measures will exert over the future of lithotrity. Finally, if to its other advantages, as a prognostic and therapeutic guide in lithotrity, the thermometer enables the operator to regulate to the best advantage the duration, extent and frequency of the crushings, we can readily believe that the future of patients suffer-

ing from stone will be far more advantageously affected by modifications such as are portrayed by Vance in the paper to which we have been referring, than will ever be brought about by the more radical, and seemingly more popular, measures of the day.

NOTES AND COMMENTS.

Therapeutical Notes.

CHRYSOPHANIC ACID IN SYPHILIS.

Dr. Reumont, of Aix la Chappelle, recommends this acid in obstinate syphilides of the face and hands. He takes—

R. Chrysophanic acid, 1 to 2 parts
Ung. petrolei, 10 parts. M.

Sig.—Apply once every day or two days.

It is especially valuable in psoriasis syphilitica. Of course, specific internal treatment is continued.

GYNOCARDIA OIL IN SKIN DISEASE.

The chaalmoogra oil, from the *Gynocardia odorata*, is attracting increased attention for its effect in leprosy cases. The following formula has been suggested by Mr. J. Moss as a good and economical one for this ointment:—

R. Oil gynocardia, 2 parts
Paraffin, 1 “
Ozokerine, 5 “ M.

The dose of the powdered seeds is about six grains, and of the oil itself three or four grains may be given. The present price of the oil in London is about ten shillings per pound.

SASSAFRAS OIL IN RHUS POISONING.

A correspondent of the *Druggist's Circular* states that a severe case of poisoning from *Rhus toxicodendron* was successfully treated with an infusion of the bark of the root of sassafras. The person poisoned had eaten the leaves of the rhus, mistaking them for the Virginia creeper, *Ampelopsis quinquefolia*, and, in consequence, severely suffered internally. The patient was bathed with the infusion, and was also made to drink freely of it. From the small number of remedies applicable for an internal poisoning of the kind, the above is of interest.

SUGGESTIONS ON DIPHTHERIA.

A writer in the *Boston Journal of Chemistry* gives the treatment of diphtheria of Dr. Herff, of Hillsboro, Ill., which he qualifies as “eminently successful.” It consisted substantially of an emetic (pulv. ipecac. and cupri sulph., equal parts, proportioned to age), followed by—

R. Potass. chlor., ʒ ij
Syr. rub. idæi, ʒ ij
Aq. pur., ad ʒ vj,

both used as a gargle and administered internally.

Prof. Mosler, of Greifswald (*Berl. Klin. Wochenschrift*, No. 21, 1879), strongly advocates the use of protracted inhalations of the oil distilled from the leaves of *Eucalyptus amygdalina* and globulus, to arrest the local mischief in diphtheria of the pharynx. He asserts that all the cases in this category which he has so treated have recovered, though admitting that there are “fulminating” cases of diphtheria, in certain epidemics, which resist all treatment.

Quinine for Hypodermic Use.

The following is the preparation preferred in the Hamburg General Hospital:—

R. Quinæ muriatis, 20 parts
Acidi muriatici, 12 “
Uree, 3 “

The salt thus formed is soluble in equal parts of water, and hence large doses can be given by the hypodermic syringe.

The quantity of this 50 per cent. solution injected varied from a half to three syringefuls. The local irritation consequent on the injection was in most cases very slight, and at most consisted in a circumscribed burning pain (which was soon relieved by cold Goulard water), without redness or swelling. Doses of a gram produced in men scarcely any subjective sensations, and the noises in the ear complained of by women and children soon disappeared. The anti-febrile effects were evident and certain, intermittents disappearing after the second or third injection. This form of administration seems especially indicated (1) in those sensitive persons who have an invincible objection to taking quinine by the mouth; (2) when gastric affections coexist; (3) in children; and (4) in hospital and pauper practice, as a much smaller quantity of quinine is required than when it is administered internally.

The Poison of the Toad.

The common garden toad is well known to secrete an acrid and irritating fluid in the large warts on its back; but that this ever produces fatal results has not been believed. Nevertheless, the *London Medical Record* reports the case of a child, of six years old, following a large toad on a hot summer's day, throwing stones at it. Suddenly he felt that the animal had spurted some moisture into his eye. There then set in a slight pain and spasmodic twitching of the slightly injected eye, and two hours after coma,

wavering sight, desire to bite, a dread of food and drink, constipation, abundant urine, great agitation, manifested themselves, followed on the sixth day by sickness, apathy, and a kind of stupor, but with regular pulse. Some days later, having become comparatively quiet, the boy left his bed; his eyes injected, the skin dry, the pulse free from fever. He howled and behaved himself like a madman, sank into imbecility and speechlessness, from which condition he never rallied.

Curare in Hydrophobia.

Dr. Offenburg, of Munster, has lately treated with curare a woman who had been bitten by a mad dog. He did not confine himself to the usual small doses, but injected about two decigrams of curare under her skin in the course of five hours. The patient was in a terrible state, and seemed on the point of being suffocated when the injections were made. After the first injection the convulsion ceased suddenly. This was owing to the power which curare has of paralyzing motion. After a short pause, however, the convulsions began again, and several additional injections had to be made. At last the effects of the curare became so powerful that the patient was in danger of dying of paralysis of the heart and the respiratory muscles, and could only be saved by artificial respiration. She then fell into a state of exhaustion and weakness, from which she recovered after a time, and became quite well.

The Frequency of Conception in Prostitutes.

At a recent discussion of the St. Louis Medical Society, Dr. McPheeters expressed the opinion that prostitutes more frequently conceive than is supposed; and the explanation of its apparent infrequency is that in plying their vocation, after conception, from excessive and promiscuous coition, and in the use of vaginal enemata, and other causes, the ovum passes off at the subsequent menstruation, under the head of menorrhagia.

Dr. Hurt expressed the belief that the explanation made by Dr. McPheeters is the correct one in many instances, but from observations he thought prostitutes are not as susceptible of conception as virtuous females are, for the reason that excessive indulgence and the liability to infectious diseases usually bring about a condition of the canal of the cervix uteri that is calculated to be obstructive to conception. Although the uterus and ovaries may be active, the catamenial periods

may be regular, the ovaries may be healthy, yet there is a catarrhal condition of the cervix that is calculated to prevent the ingress of the spermatozoa, and consequently to obstruct the process of foetation or conception.

In a similar way Dr. Thomas Kennard denied that these women become pregnant and abort so frequently as Dr. McPheeters thinks, and considered his position proven by the remarkable exemption from serious illness among the better class of them, and the good health that most of them enjoy, in spite of the depressing and damaging effect that we would suppose their degraded mode of living would have upon their constitutional vigor.

Periodicity of Malarial Disease.

In a work recently published at Leipzig, entitled *Die Gesundheitsverhältnisse des Marschlandes*, Dr. Dose shows, from a study of nearly 7000 cases of malarial fever, extending over about a quarter of a century, that in addition to the well-known seasonal variations of that class of diseases, there are other undulations of the line of frequency, each embracing about a five years' period. The observations were made about the southern shores of the Baltic Sea, near Meldorf, by Dr. Michaelsen, a country practitioner.

It would be very interesting to have such a study repeated in this country; and as we have pointed out on a previous occasion, this very large and important class of fevers can only be studied to advantage away from cities, and hence it is to *country practitioners* we must look for the work.

The Poison of Typhoid Fever.

It is needless to say that the nature of the poison which gives rise to typhoid is a vexed and uncertain question. There is an able discussion on the etiology of the disease, by Dr. Robert King, in a late number of the *Medical Times and Gazette*. He winds up rather a long lecture with these words:—

"I am inclined to think that it is not only possible, but even probable, firstly, that the poison of typhoid fever is a soluble, and perhaps volatile body, formed on the ammonia type by the decomposition of albuminous matter derived from inflamed intestine; that it may be, in fact, a sort of animal alkaloid; and, secondly, that in the case to which I have specially directed your attention to-day the poison was most likely generated *de novo* in my own house drain, during the putrefaction of the albuminous stools already

mentioned. I think also that, owing in a great measure to the obstruction existing at the point of junction of this drain with the main sewer, the gaseous products of the decomposition were prevented from escaping into the sewer, and ascending the soil-pipe, were absorbed by the water, which, as I have already indicated, was undoubtedly the medium through which the poison was conveyed." This is not exactly sewer gas, but it is close to it. Dr. King suggests that physicians residing in the country are better situated to study this problem than those in the city, as their cases are more isolated.

CORRESPONDENCE.

On Salicylic Acid.

ED. MED. AND SURG. REPORTER:—

Much has recently appeared in medical periodicals on the alleged almost marvelous powers of salicylic acid.

The accounts that have been given from time to time of its efficacy in the treatment of inflammatory rheumatic fever partake, to a considerable extent, of the marvelous, one writer claiming that during his experience with the drug, in the treatment of over forty cases, the disease did not extend over as many days as it formerly did weeks under other methods of treatment. And another that to say it excelled all other methods of treatment would be giving it scanty praise. And in the January number of the *Medical News and Library*, 1878, is given the report of a case complicated with pericarditis and bronchopneumonia, that was relieved (when the patient was apparently dying) by the salicylate of soda, after a fair trial of the alkaline treatment. In the *St. Louis Clinical Record* its value as an external application in burns and scalds is presented, and according to the statements made it meets every indication the physician could desire in the treatment of these distressing accidents. Also, in the treatment of pityriasis capitis it is of great value. Dr. Otto, of St. Petersburg, has found an inhalation of a two per cent. solution of the drug to be an effectual remedy in pertussis. Two different writers in the *MEDICAL AND SURGICAL REPORTER* discovered, almost simultaneously, that in the treatment of malarious fevers salicylic acid possessed great tonic and antiperiodic properties, and some controversy occurred as to their respective claims to priority. But notwithstanding the fact that the price of the salts of Peruvian bark was at the time alarmingly high, it was unaffected by the discovery, except that it continued to advance, at a rate more gratifying to Powers & Weightman than to the great army of Shakers. An injection of a solution of the acid in dysentery has been found to relieve the distressing symptoms of that complaint, and to establish convalescence with gratifying celerity. In the *British Medical Journal*, of recent date, a writer claims to have used it for the last three years with "unvarying success," in the treatment of

both mild and severe cases of scarlet fever and diphtheria. Its virtues in typhoid fever have also been set forth with equal vigor. Its wonderful utility in restoring the hair in alopecia was set forth extravagantly in an article I read not long since.

The profession have not, however, been a unit in this unqualified endorsement of its merits. Dr. C. T. Jewett found that a patient to whom he had administered the drug for some time was no longer able to obtain an erection of the penis, and this power was only restored after the remedy had been discontinued some time. A veterinary surgeon put himself on large doses of acid for the cure of rheumatism, and although he did not claim that it prevented stiffness of the joints, it did prevent stiffness in other localities to such an extent that the unfortunate man had no erection for the space of three months. A writer in the *British Medical Journal* stated last summer that fifteen grains of the pure acid, used as a snuff daily, would cure hay fever; and a physician in Kentucky innocently duplicated the prescription for one of his patients, who was not copper-lined, with the most unpleasant results. Injury of the teeth and necrosis of the tibia have been ascribed to its use, and the charge is apparently sustained by the fact that the urine is loaded with the calcareous salts of bone when the influence of the drug is obtained.

Dr. Charles H. Hall, of Macon, Ga., claims, in a January number of the *Medical and Surgical Reporter*, 1878, the honor of immortalizing an African by its use. "While undue conservatism is not a virtue," yet still it is a significant fact that the testimony of those men who would be considered authoritative as to the medicinal value of any new drug is generally the last obtained. Alfred Stillé states in his last work, the *National Dispensatory*, that if salicylic acid and its compounds are curative of any disease it is rheumatism; and in a clinical lecture of recent date says that he is personally unacquainted with the effect of the drug in this disease, and has thus far not even been tempted to employ it.

That it is necessary that we should experiment to a certain extent, in order to determine the effect of new remedies, is true, but we should ever bear in mind, while so doing, that the position of the pioneer physician is more enviable than that of the pioneer patient.

Utah, Illinois.

LIVY HATCHITT, M.D.

Sulphurous Acid as a Disinfectant.

ED. MED. AND SURG. REPORTER:—

From my observations and experiments with different chemicals, I find that sulphurous acid will destroy all animalculæ and fermentation if it can be brought in contact with it. It is evident that the disinfectants used on the U. S. steamer "Plymouth" did not have the desired effect of destroying the germ or virus on board of that vessel. I think the reason is very plain why it did not. There was bilge water in the hold of the vessel, and the fumigation for two days, with one hundred pounds of sulphur, was not sufficient to acidulate the water in the hold of the ship, to destroy the germ or virus.

The medical inspectors of the United States Navy, W. T. Hound, T. W. Leach and Charles H. Burbank, say: "We made a careful and thorough inspection of every part of the ship ('Plymouth'), personally, visiting cabin, ward-room, steerage, berth deck, sick bay, store room, shaft alley and bilge, and found them all in a very cleanly condition and free from all offensive odors. The bedding and clothing were aired while we were on board, and appeared to have been well cared for. On the berth deck, from abreast the galley aft, we found very many of the knees, ends of cross timbers, and large portions of the inner planking, in a badly damaged condition. Officers and crew were apparently in excellent health. A few men ill with trifling diseases, and one convalescing from yellow fever, formed the sick list."

The damaged timbers and the bilge water are the places where the disease germ would seek a hiding place. Covered with water and moisture, the fumes of sulphur could not reach the poison. The vessel was in Boston harbor several weeks during last winter, and the weather was very cold, so much so that buckets of water froze on board of the ship. After all the fumigating, cleaning and freezing, as the medical inspectors assert, the vessel was refitted and put to sea during the first days of last March, and after having arrived in the tropics a gale came up, rendering it necessary to close the hatches of the vessel; the motion of the ship in the gale stirred up the bilge water and set the disease germ free in the ship, and the men imbibed the poison by being confined in the infected air of the ship, and hence the breaking out of the disease—yellow fever.

I am of the opinion that if the bilge water and the rotten timbers had been thoroughly saturated with sulphurous acid, there would not have been a return of the fever on board of the Plymouth. My examination and experiments with the microscope on bacteria taken from the vomited matter of a man who was suffering from a malignant malarial fever, during the few warm days of last March, show that it contained great numbers of them, very active, when the temperature was above 90° Fahrenheit. I cut slips out of the shirt that the patient vomited on, and put them in warm water, the water having been previously boiled, in order to destroy any animalcule that it might contain. After standing a short time I examined the water under the microscope, and found it alive with bacteria.

I tried several chemicals in the water, in order to ascertain what would destroy the life of bacteria. I am happy to say that sulphurous acid and the temperature of boiling water had the desired effect. I have three specimens in my office, corked in vials, which I have kept since the ninth day of last March. I have examined the specimens often since that time, under the microscope, and in the two specimens that contained no sulphurous acid the number has increased threefold; in the specimens to which I added sulphurous acid not one can be found alive.

I have examined these specimens often since that time, during cold weather, and found them motionless, but by holding the vial containing

them in the hand, or next to the body, until the vial was warm, and then examining them, the microscope showed very active movements.

Evansville, Ind.

W. S. Ross, M.D.

NEWS AND MISCELLANY.

International Quarantine.

At a meeting lately held in London, Eng., of the Association for the Reform and Codification of the Law of Nations, Sir Sherston Baker, Bart., read a paper on International Rules of Quarantine, containing a number of excellent suggestions, which he presented in the form of forty articles. The following brief outline of his suggestions refers to the plague, yellow fever, and cholera: An "international bill of health" to be granted by the local authority of the port of departure to every vessel, and to be delivered up by the vessel at the ultimate port of destination. This bill to be *viséd* at the port of departure by the consul representing the port of destination, in such terms as he shall think fit. A similar *visé* to be required at every port touched at, both from the local authority and from the consul representing the port of destination. This bill of health to be accepted in all ports of the high contracting parties. A foul bill of health, or a case of disease, past or present, on board, or the fact of any port having become infected within a limited time after the departure of a vessel from it, to authorize the local authority of the port of arrival to place the arriving or touching vessel in quarantine, according to a certain scale, containing a maximum and a minimum period of quarantine; it being optional to every State to adopt any period within those limits. Every State to preserve its own municipal quarantine system, except on such points as may nullify or contradict these articles. Measures of disinfection for passengers, crew, and cargo to be required, but in every case to be left to the municipal regulations to supply the details. Lazarets and hospital ships to be provided in sufficient number, and to be regulated according to the best sanitary principles, but again the details to be left to the municipal authority. To avoid the necessity of placing a whole State in quarantine, especially where a State comprises distant colonial possessions, each country to be divided by its own government into territorial divisions, to be termed quarantine "centres." Each State to engage to guard rigidly against any infected "centre," and to place the same in quarantine.

Hypodermic Injection of Morphia.

Dr. H. H. Kane, of New York City, who has for some time past been collecting statistics on the hypodermic injection of morphia, would consider it a great favor if members of the profession who see this, and have had experience with the instrument, will answer the following questions:—

1. What is your usual dose?
2. Do you use it alone or with atropia?
3. What is the largest amount you have ever administered?

4. Have you had inflammation or abscess at the point of puncture?

5. Have you had any deaths or accidents caused by this instrument?

6. Do you know of any cases of opium habit thus contracted?

Where there has been an autopsy (5) please state the fact and the results obtained therefrom. All communications will be considered strictly confidential, the writer's name being used only when he gives his full consent thereto. Address all letters to Dr. H. H. Kane, 366 Bleecker street, New York.

Medical Missionaries.

Dr. J. Kevoe Kian, of Chicago, contradicts the report that young Turkish students sent to America to receive an education qualifying them for missionary work, aim instead at learning medicine, so as to be able to go home and practice profitably. The Turks, the Doctor says, have been sent here for a religious education, though "there are a few young Armenians, members of missionary churches, who, seeing the need of medical men among their people, have come to this country to obtain instruction. The missionaries themselves often speak of this need, and the older missionaries have encouraged these young men in their effort. Three or four of them have studied both medicine and theology, a few only medicine. They have returned to Turkey, and are now laboring as Christian physicians; and are producing an impression which is highly honorable both to their brethren and to this country."

The Cultivation of Cinchona.

In striking contrast to our government, the ruling powers of Holland, England and France have taken the greatest interest in making themselves wholly independent of other nations for their supplies of the cinchona alkaloids and bark. In India the English, in Siam the French, and in Java the Dutch, have appropriated large sums to introduce the best cinchona seeds and establish large nurseries. A cinchona plantation is found to be as good as a gold mine. The net profits of those in Java are about \$70.00 per hectare (not quite 2½ acres), and with proper care the plantation will increase in value every year, at a rate greater than the interest of its cost. The Java bark yields from seven to nine per cent. of quinine. It is the *Cinchona calisaya ledgeriana*, and is worth nearly double the best South American bark.

Mortality of Cities.

The following are the death rates of some large cities: It appears that Alexandria heads the list, with a mortality of 44 per 1000. After the Egyptian capital comes Breslau, with a death-rate of 41; then Buda Pesth, with 39; New York, 36; St. Petersburg, 35; Berlin and Bombay, 33; Naples, 32; Munich, 31; Brooklyn, 30; Dresden and Madras, 29; the lowest being the Hague, with a death rate of 17 per 1000.

Pharmaceutical Preparations.

THE LOWER ALKALOIDS OF BARK.

It may be taken for granted that, in this country, more attention will have to be paid to the other alkaloids of bark than quinine. We have at various times called attention to "cincho-quinine" as an efficient substitute. Dr. Henry Gibbons, of San Francisco, speaks of it very favorably in his "Notes of Hospital and Private Practice." It is prepared by Billings, Clapp & Co., Boston. In this city the firm of Keasbey & Mattison prepare "dextro-quinine," which Dr. Gibbons mentions as "a very active agent." As these substitutes can be bought for much less than quinine sulphates, their value is evident.

Items.

—Portugal has issued a decree, establishing quarantine against the State of New York and the State of New Jersey. The decree is based on "official information and the report of the Consulting Board of Public Health." The effect of this quarantine is reported by the United States consul at Lisbon to be very oppressive to American vessels entering the ports of Portugal.

—Three medical celebrities met together to consult, at the sick bed of General X. After they go, the General rings for his man-servant: Well, Jacques, you showed those gentlemen out; what did they say? "Ah, General, they seemed to differ with each other; the big fat one said that they must have a little patience, and at the autopsy—whatever that may be—they would find out what the matter was."

—Some experiments have been made by Dr. B. Joy Jeffries, of Boston, to detect the existence of color blindness among the employees of railroad and steamboat companies. Dr. Jeffries has recently examined some of the employees of the Boston and Lowell Railroad, and his report to the company states that out of ninety-four employees constantly called upon to distinguish lights by their color, two were color-blind and eighteen were below the visual standard.

—An ingenious device is mentioned in the *Veterinary Journal*, by which horses given to biting, rearing, kicking, etc., are rendered inoffensive, and submit peaceably to be groomed and harnessed. To obtain this result a weak current of electricity is passed into the mouth of the horse each time it becomes restive; the will of the animal seems almost annihilated. The current is produced by a small induction machine, the wires of which communicate with the bit of the bridle. In the case of resistance by the horse, the driver has merely to push a button, when a current passes immediately, and the animal becomes docile. The employment of electricity is said to produce a sort of uneasiness or torpor, rather than pain, and is much less barbarous than many taming methods hitherto adopted, such as those which depend on weakening by deprivation of food, on fatigue, etc.

DEATH.

FINLEY.—At his residence, in Philadelphia, September 8th, Dr. Clement A. Finley, ex-Surgeon General of the United States Army, in the 82d year of his age.